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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,133	12/01/2003	Chang-Hun Lee	8071-42 (OPP 030497US)	2641
F. CHAU & ASSOCIATES, LLC WOODBURY ROAD			EXAMINER	
			CHEN, WEN YING PATTY	
WOODBURY, NY 11797			. ART UNIT	PAPER NUMBER
			2871	
		•		
			MAIL DATE	DELIVERY MODE
		•	05/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary		Application No.	Applicant(s)			
		10/725,133	LEE ET AL.			
		Examiner	Art Unit			
		W. Patty Chen	2871			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
WHIC - Exten after: - If NO - Failur Any r	CRTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAISIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	1. the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)🖂	Responsive to communication(s) filed on <u>09 February 2007</u> .					
2a)⊠	This action is <b>FINAL</b> . 2b) This action is non-final.					
-	—					
	closed in accordance with the practice under E	ix parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Dispositi	on of Claims					
5)⊠ 6)⊠ 7)□	Claim(s) <u>1-3,5 and 9-39</u> is/are pending in the a 4a) Of the above claim(s) <u>21-37</u> is/are withdraw Claim(s) <u>1-3,5,9-20 and 39</u> is/are allowed. Claim(s) <u>38</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	n from consideration.				
Applicati	on Papers					
10)🖾	The specification is objected to by the Examine The drawing(s) filed on <u>01 December 2003</u> is/an Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	re: a) $\square$ accepted or b) $\square$ object drawing(s) be held in abeyance. See ion is required if the drawing(s) is object.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority u	ınder 35 U.S.C. § 119		•			
12) ⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ⊠ All b) □ Some * c) □ None of:  1. ☑ Certified copies of the priority documents have been received.  2. □ Certified copies of the priority documents have been received in Application No  3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
Attachmen		»□	(DTO 442)			
2) Notice 3) Inform	te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) tr No(s)/Mail Date 2/01/07.	4) Interview Summary Paper No(s)/Mail D. 5) Notice of Informal F 6) Other:	ate			

Art Unit: 2871

### **DETAILED ACTION**

### Response to Amendment

The Amendment filed on Feb. 9, 2007 has been entered. Claims 7 and 8 are cancelled and claim 39 is newly added per the Amendment filed. Therefore, claims 1-3, 5 and 9-39 are now pending in the current application, however, claims 21-37 are withdrawn from consideration.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

Art Unit: 2871

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta et al. (US 6266116).

Ohta et al. disclose in Figure 21 a liquid crystal display, comprising:

a substrate;

a gate line (element GL) formed on the substrate and extending in a first direction;

a data line (element DL) intersecting the first direction;

a first pixel electrode (element PX) formed in a pixel area defined by intersections of the gate line and the data line, the first pixel electrode formed substantially parallel to the gate line;

a pixel signal line (element PL, as shown in the figure below) connected to the pixel electrode;

a switching element (element TFT) connected to the gate line, the data line, and the pixel signal line;

a first common electrode (element CT) formed in the pixel area parallel to the first pixel electrode;

a common signal line (element CL) formed in the pixel area connected to the common electrode;

a second pixel electrode (element PX) formed in the pixel area opposite to the first pixel electrode and connected to the pixel signal line; and

Art Unit: 2871

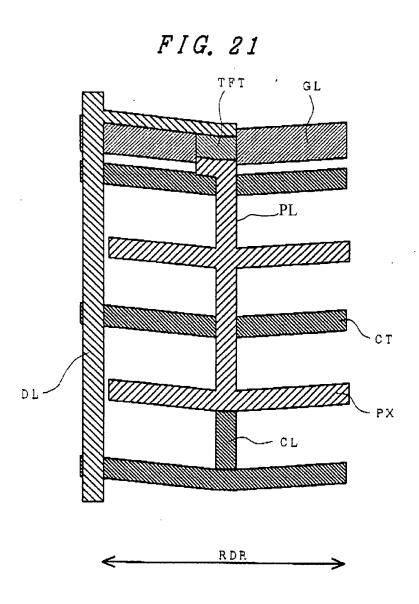
a second common electrode (element CT) formed in the pixel area, the second common electrode opposite to the first common electrode and connected to the common signal line.

Ohta et al. failed to disclose that an outermost electrode of the first pixel electrode, the pixel signal line and an outermost electrode of the second pixel electrode join together to form a trapezoid shape.

However, Ohta et al. in another embodiment as shown in Figure 7 and described in Column 21 lines 1-25, that the first pixel electrode and the second pixel electrode can be formed such that they tilt in opposite directions with respect to the pixel signal line, thus resulting in a trapezoid shape formed between the first and second pixel electrodes and the pixel signal line.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct a liquid crystal display as taught by Ohta et al. and further wherein the first and the second pixel electrodes are tilted in opposite directions with respect to the pixel signal line as shown in Figure 7, since Ohta et al. teach that by tilting the first and second pixel electrodes in opposite directions makes it possible to use two driving directions of the liquid crystal molecules in one picture element (Column 21, lines 26-28).

Art Unit: 2871



## Allowable Subject Matter

Claims 1-3, 5, 9-20 and 39 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 1 (Amended): None of the prior arts either along or in combination fairly teach or suggest a liquid crystal display wherein at least the first or second capacitor

Art Unit: 2871

electrode is triangular in shape in addition to the recited limitations. Therefore, claim 1 is deemed non-obvious and inventive over the prior arts, thus is allowed.

As to claims 2-3, 5, 9-20 and 39 (New): Since claims 2-3, 5, 9-20 and 39 depend either directly or indirectly on the allowed claim 1, therefore, are also allowed.

### Response to Arguments

Applicant's arguments with respect to claim 38 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2871

Page 7

Any inquiry concerning this communication or earlier communications from the examiner should be directed to W. Patty Chen whose telephone number is (571)272-8444. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

W. Patty Chen Examiner Art Unit 2871

WPC 5/11/07

A Justilla ANDREW SCHECHTER PRIMARY EXAMINER